

Thus, what has been shown and described is a digital recording logger that is modular in construction, is capable of using digital audio tapes in an effective manner and can be networked to provide a plurality of workstations and nodes.

The above embodiments have been given by way of illustration only, and other embodiments of the invention will be apparent to those skilled in the art from consideration of the detailed description. Accordingly, limitations on the instant invention are to be found only in the claims.

What is claimed is:

1. A modular digital recording logger, comprising:  
a housing;

at least two circuit modules in said housing for converting analog voice signals to digital voice signals, each of said circuit modules including at least two terminals for receiving said analog voice signals, each of said terminals being capable of receiving said analog voice signals for recording a two-way conversation;

a circuit in said housing for compressing said digital voice signals received from each of said circuit modules to provide compressed voice data;

a first bus in said housing for providing communication between said circuit module and said compressing circuit;

a multiplexer circuit in said housing for providing communication between said compressing circuit and said first bus, wherein said multiplexer circuit multiplexes voice signals exchanged between said compressing circuit and said circuit modules on said first bus; and  
a digital audio tape (DAT) drive for storing said compressed voice data.

2. The modular digital recording logger of claim 1, further including a clock in communication with said computer.

3. The modular digital recording logger of claim 1, further including a speaker in communication with at least one circuit module.

4. The modular digital recording logger of claim 1, further comprising a hard disk drive in said housing for storing and reproducing said compressed voice data.

5. The modular digital recording logger of claim 4, further comprising: a computer in said housing for operating said DAT drive and/or said hard disk drive to store and reproduce said digital voice signals; and

a second bus in said housing for connecting said computer to said hard disk drive and said DAT drive.

6. The modular digital recording logger of claim 1, wherein said first bus is a time division multiplexing (TDM) bus and said multiplexer circuit is a time division multiplexer circuit.

7. The modular digital recording logger of claim 1, wherein said second bus is a small computer system interface (SCSI) bus and further comprising a SCSI adapter for connecting said computer to said SCSI bus.

8. The modular digital recording logger of claim 1, wherein said compressing circuit is a processor.

9. The modular digital recording logger of claim 8, further comprising an ISA bus for providing communication between said computer and said processor.

10. The modular digital recording logger of claim 7, further including a random access memory (RAM) for storing said compressed voice data before it is transmitted to the SCSI adapter.

11. A network system of modular digital recording loggers, comprising:

at least two digital recording loggers for logging voice conversations, each of said recording loggers comprising:

*Sub  
A1*

*Sub  
A2*

*Sub  
A3*

*Sub  
A4*

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a housing:

- a circuit in said housing for converting analog voice signals to and from digital voice signals, said circuit modules including at least two terminals for receiving said analog voice signals, and wherein each of said terminals is capable of receiving said analog voice signals for recording a two-way conversation.
- a circuit in said housing for compressing said digital voice signals received from each of said circuit modules to provide compressed voice data.
- a first bus in said housing for providing communication between said circuit module and said compressing circuit.
- a multiplexer circuit in said housing for providing communication between said compressing circuit and said first bus, wherein said multiplexer circuit multiplexes voice signals exchanged between said compressing circuit and said circuit modules on said first bus.
- a digital audio tape (DAT) drive for storing said compressed voice data.
- a hard disk drive in said housing for storing and reproducing said compressed voice data.
- a first computer in said housing for operating said DAT drive and/or said hard disk drive to store and reproduce said digital voice signals, and
- a second bus in said housing for connecting said computer to said hard disk drive and said DAT drive;
- a second computer for processing compressed digital voice signals received from each of said recording loggers; and
- a third bus connecting each of said recording loggers to said second computer.
- 12. The network system of claim 11, further comprising a clock in communication with said first computer.
- 13. The network system of claim 11, wherein said third bus is a local area network (LAN) bus.
- 14. The network system of claim 13, wherein said second computer and each of said recording loggers further include a LAN adapter for providing connection to said LAN bus.
- 15. The network system of claim 11, wherein said first bus is a time division multiplexed (TDM) bus and said multiplexer circuit is a time division multiplexer circuit.
- 16. The network system of claim 11, wherein said second bus is a small computer system interface (SCSI) bus and further comprising a SCSI adapter for connecting said first computer to said SCSI bus.
- 17. The network system of claim 16, further comprising a random access memory (RAM) for storing said compressed voice data before it is transmitted to the SCSI adapter.
- 18. The network system of claim 11, wherein said compressing circuit is a processor.
- 19. The network system of claim 18, further comprising an ISA bus for providing communication between said first computer and said processor.
- 20. The network system of claim 11, wherein said second computer is a workstation.
- 21. The network system of claim 11, further comprising a speaker in communication with said second computer for reproducing said analog voice signals.
- 22. A method of manufacturing a modular digital recording logger, comprising the steps of:
  - selecting a number of circuit modules for converting analog voice signals to and from digital voice signals, each of said circuit modules including at least two terminals for receiving said analog voice signals, and

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wherein each of said terminals is capable of receiving said analog voice signals for recording a two-way conversation;

installing said selected number of said circuit modules in a housing; 5

installing a circuit in said housing for compressing said digital voice signals received from each of said circuit modules to provide compressed voice data;

installing a first bus in said housing for providing communication between said circuit module and said compressing circuit; 10

installing a multiplexer circuit in said housing for providing communication between said compressing circuit and said first bus, wherein said multiplexer circuit multiplexes voice signals exchanged between said compressing circuit and said circuit modules on said first bus; and 15

installing a digital audio tape (DAT) drive in said housing for storing and reproducing said compressed voice data. 20

23. The method of claim 22, further comprising the steps of connecting to said comprising circuit a hard disk drive for storing and reproducing said compressed voice data.

24. A method of networking a plurality of digital recording loggers, comprising the step of: 25

selecting a number of modular digital recording loggers for logging voice conversations, each of said recording loggers comprising:

- a housing; 30
- a circuit in said housing for converting analog voice signals to and from digital voice signals, said circuit including a plurality of terminals for receiving said analog voice signals, and wherein each of said ter-

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minals is capable of receiving said analog voice signals for recording a two-way conversation.

- a circuit in said housing for compressing said digital voice signals received from each of said circuit modules to provide compressed voice data.
- 5 a first bus in said housing for providing communication between said circuit module and said compressing circuit.
- a multiplexer circuit in said housing for providing communication between said processor and said first bus, wherein said multiplexer circuit multiplexes
- 10 voice signals exchanged between said compressing circuit and said circuit modules on said first bus.
- a digital audio tape (DAT) drive for storing and reproducing said compressed voice data.
- 15 a hard disk drive for storing and reproducing said compressed voice data.
- a first computer in said housing for operating said DAT drive and/or said hard disk drive to store and reproduce said digital voice signals, and
- 20 a second bus in said housing for connecting said computer to said hard disk drive and said DAT drive;
- installing said selected number of said recording loggers;
- installing a second computer for processing compressed digital voice signals received from each of said recording loggers; and
- 25 installing a third bus connecting each of said recording loggers to said second computer.
- 25. The method of claim 24, wherein said third bus is a local area network (LAN) bus.
- 30 26. The method of claim 25, wherein said second computer and each of said recording loggers further include a LAN adapter for providing connection to said LAN bus.

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